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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/780,206	02/09/2001	Michael Fritz	RDID0028US	5556

20306 7590 02/22/2005  
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EXAMINER

CHUNDURU, SURYAPRABHA

ART UNIT PAPER NUMBER

1637

DATE MAILED: 02/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/780,206	<b>Applicant(s)</b> FRITZ ET AL.	
	<b>Examiner</b> Suryaprabha Chunduru	<b>Art Unit</b> 1637	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 29 December 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 36-41 and 68-76 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 36-41 and 68-76 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date: <u>6/7/04</u>   | 6) <input type="checkbox"/> Other: _____                                    |

**DETAILED ACTION**

1. Applicants' response to the office action filed on December 29, 2004 has been entered.
2. The IDS filed on June 7, 2004 and the Supplemental IDS filed on April 28, 2004 have been entered.
3. Claims 1-35, 42-67 are cancelled. Claims 36-41, 68-76 are pending.

***New Grounds of Rejections***

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 36-41, 68-76 are rejected under 35 U.S.C. 102(e) as being anticipated by Fields (US 2003/0027203).

Fields teaches an apparatus of 36, 70, and 72, for detecting nucleic acids in a sample (see page 2, paragraph 0022) comprising

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(a) a binding space for purifying nucleic acids by immobilizing the nucleic acids and separation of impurities (see page 2, paragraph 0027, page 4, paragraphs 0060-0061, Fig. 5);

(b) an amplification space for amplifying the nucleic acids (see fig. 6, paragraph 0063) wherein a part of amplification space is identical to a part of an amplification space (see Fig. 6, wherein the vial 420 is connected to amplification space by capillary tubes);

(c ) a detection space for detecting the nucleic acids (see paragraphs 0063, indicates the amplified products are moved into device 425, for detection of amplified nucleic acid products).

With regard to claims 37, 73, Fields teaches that the apparatus comprises reagents for purifying, amplifying and detecting the nucleic acid (see page 3, paragraphs 0031-0034);

With regard to claims 38, 69, Fields teaches that the detection space comprises at least part of the amplification space and the binding space, which facilitates transport of the sample and reagents through the binding space, amplification space and the detection space (see Fig. 1-3 and Fig. 6, wherein the detection space comprises a part of amplification space and a part of the binding space connected by a 3-way and four-way connecting capillary tubes facilitating transport of sample and reagents, page 3, paragraph 0049-0054);

With regard to claim 40, 75, Fields teaches that the capillary space is a capillary reaction vessel surrounded by a heatable metal layer (see page 4, paragraph 0061, page 6, claim 3, which indicates a heater);

With regard to claim 41, 76, Fields teaches that the capillary space is a polystyrene (plastic) (see page paragraph 0067);

With regard to claim 68, Fields teach an apparatus for amplifying nucleic acids comprises capillary reaction vessel surrounded by a single heatable metal layer, wherein the layer is coated

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on the capillary vessel (see page 5, paragraph 0063, which indicates the PCR amplification reaction vessel is thermal cycling unit);

With regard to claims 71, 47, Fields teaches that the binding space is defined by an inner surface of a reaction vessel, wherein the inner surface (adsorption filter element), which is a capillary space, that binds nucleic acids (see page 4, paragraph 0061). Thus the disclosure of Fields meets the limitations in the instant claims.

***Response to arguments***

5. With regard to the objection to priority document maintained in the previous office action Applicants arguments, IDS submitted on June 7, 2004 and the English translation of German Patent Application No. DT 23 43 987 are considered and the objection is withdrawn herein.

6. With regard to the rejection made in the previous office action under 35 USC 112, second paragraph, Applicants arguments and amendment are fully considered and the rejection is withdrawn in view of the amendment.

7. With regard to the rejection made in the previous office action under 35 USC 102(b), Applicants arguments and amendment are fully considered and the rejection is withdrawn in view of the persuasive arguments.

***Conclusion***


No claims are allowable.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Suryaprabha Chunduru whose telephone number is 571-272-0783. The examiner can normally be reached on 8.30A.M. - 4.30P.M , Mon - Friday,.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Benzion can be reached on 571-272-0782. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Surya Prashna Chunduru  
Examiner  
Art Unit 1637

  
JEFFREY FREDMAN  
PRIMARY EXAMINER  
2/15/05